

Abstract of the Disclosure

In a sensor fusion apparatus and method for optical and magnetic motion capture systems and a record medium capable of being read through a computer having a writing of a program to realize the inventive method, in which a shortcoming of respective systems can be overcome and merits can be led by simultaneously using the optical motion capture system (OMCS) and the magnetic motion capture system (MMCS) to obtain motion capture data more precisely, the method includes a first step of obtaining an optical marker signal and a magnetic sensor signal for the motion capture object; a second step of converting the magnetic sensor signal into a corresponding optical marker signal, and acquiring a virtual optical marker signal; a third step of modeling a relation between the virtual optical marker signal and the optical marker signal to a dynamic model through a system identification; and a fourth step of using the optical marker signal as it is, when the optical marker signal is normal, and using a signal gained by inputting the virtual optical signal into the dynamic model, as a usage for a correction of the optical marker signal, by using the dynamic model when the optical marker signals are discontinuous, according to a normal or abnormal state of the optical marker signal.